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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/251,988	02/17/1999	BRIAN SAMUEL BEAMAN	Y0998-088	3930

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IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT
P O BOX 218
YORKTOWN HEIGHTS, NY 10598

EXAMINER

HOLLINGTON, JERMELE M

ART UNIT	PAPER NUMBER
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2829

MAIL DATE	DELIVERY MODE
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12/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/251,988

Applicant(s)

BEAMAN ET AL.

Examiner

Jermele M. Hollington

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7, 10, 41-43, 49, 50, 58-60 and 64-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 10, 41-43, 49, 50, 58-60 and 64-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7, 10, 41-43, 49, 51, 58-60 and 64-68 are rejected under 35 U.S.C. 102(e) as being anticipated by Okubo et al (5134365).

Regarding claim 41, Okubo et al disclose a method [see also Fig. 1] comprising:
providing a substrate (board 10) having a surface (top surface of 10); forming a plurality of elongated electrical conductors (probes 30) extending away from said surface; each of said elongated electrical conductors (30) having a first end (rear end 33) affixed to said surface [via solder 331] and a second end (probe tip 32) projecting away from said surface (top of 10); there being a plurality of said second ends (32); providing a means for maintaining said plurality of said second ends (32) in substantially fixed positions [via resin 50] with respect to each other.

Regarding claim 49, Okubo et al disclose means for maintaining comprising a sheet of material (support 20) having a plurality of opening (openings 11 and 21).

Regarding claim 7, Okubo et al disclose said sheet of material (20) is spaced apart from said surface by a flexible support (opening 11).

Regarding claim 10, Okubo et al disclose said sheet (20) and said flexible support (11) forms a space containing said plurality of elongated electrical conductors (30).

Regarding claim 42, Okubo et al disclose said sheet (20) is formed and material selected from the group consisting of Invar, Cu/Invar/Cu, molybdenum, and polyimides.

Regarding claim 43, Okubo et al disclose said sheet (20) is formed from a material selected from the group consisting of a metal, a polymer, a semiconductor and dielectric.

Regarding claim 51, Okubo et al disclose said means for maintaining (20) comprises openings comprising a large region (21) and a small region (within resin 50), said compliant elongated electrical conductors (30) are first inserted through said large region (21) and then moved to said small region (within resin 50).

Regarding claim 58, Okubo et al disclose said means for maintaining (20) is a sheet of material comprising a plurality of openings (21) through which said second ends (32) project.

Regarding claim 59, Okubo et al disclose said means for maintaining (20) comprises at least one sheet of material comprising a plurality of openings (21) through which said second ends (32) project.

Regarding claim 60, Okubo et al disclose of said at least one sheet (20) is a sheet of electrically conductive material which has a top surface and a bottom surface and said openings (21) have a sidewall, a dielectric material coats said top surface and said bottom surface and said sidewall.

Regarding claim 64, Okubo et al disclose each of said elongated electrical conductors (30) projects through one of said openings (21) in said sheet of material (20).

Regarding claims 65-66, Okubo et al disclose each of said elongated electrical conductors (30) projects through one of said plurality of openings (21) in said sheet of material (20).

Regarding claim 67, Okubo et al disclose said means for maintaining (20) comprises openings (21) which are larger in size than said compliant elongated electrical conductors (30) and wherein each of said elongated electrical conductors (30) projects through one of said openings (21) in said sheet of material (20).

Regarding claim 68, Okubo et al disclose each of said plurality of openings (21) is larger in size than said compliant elongated electrical conductors (30).

Conclusion

Response to Arguments

3. Applicant's arguments filed June 4, 2007 have been fully considered but they are not persuasive.

a) The applicants argue: *"The Examiner does not identify where in the teaching of Okubo elements 30 thereof is referred to as "flexible." Thus the Examiner has not made out a prima facie case of anticipation. Also Fig. 1 of Okubo does not show elements 30 extending away from a surface of element 10. Applicants' claim 41 recites "said elongated electrical conductors having a first end affixed to said surface" and recites "elongated electrical conductors extending away from said surface." Okubo Fig. 1 does not teach this as shown in this figure commenting on Okubo Fig 1."*

In response to the above arguments, first there was a typographic error by the examiner in using the word "flexible" in the Office Action. The claims do not contain the word "flexible" with regards to the elongated electrical conductors. With regards to elements 30, claim 41 states: "...a substrate having a surface...a plurality of elongated electrical conductors extending away from said surface..." Element 30 is connected to the top surface of board 10, which represents

the substrate, by way of end 33. As shown in Fig. 1, element 30 extends downward toward IC chip 60. Base on the figure one of ordinary skill in the art may conclude that the element 30 is extending away from the top surface of board 10. Therefore, the examiner believes the prior art still reads on the claim.

b) The applicants further argue: *"Okubo shows expanded views in Fig. 2(a) and Fig. 2(b) of ends (32) in element 50. Element 50 does not comprise openings larger in size than the elongated electrical conductors. In fact Fig. 2(a) and 2(b) of Okubo show element 50 having openings that are the same size as the conductors 30 which result in ends 32 being in a fixed position and not in "substantially fixed positions" as recited in applicants claim 41."*

In response to the above, the examiner disagrees. The opening of element 50 of Okubo could not be the same size as element 30. If both are the same size, then element 30 should not be inserted through element 50 to test the DUT on top of IC chip 60. Therefore, the opening in element 50 is slightly larger for element 30 to fit through for its intended purpose. Therefore, the examiner believes the prior art still reads on the claim.

Base on the arguments above, the following is being applied.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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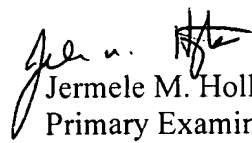
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:00 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jermele M. Hollington
Primary Examiner
Art Unit 2829

JMH
December 19, 2007